

Sewer
Acct. #:



5112216200

**Company: WASHINGTON UNIVERSITY
MEDICAL SCHOOL**

Address: 660 S. Euclid Ave.

City: St. Louis

State and Zip: MO , 63110

Ind_id	File Code	File Description
84241	41	PERMIT OVERFLOW

P
L-Side

ACCOUNT NUMBER: _____

5112-2162-00
WASHINGTON UNIV SCHOOL OF MEDICINE
660 South Euclid
St. Louis, MO 63110

COMPANY NAME: _____

CORRESPONDENCE

FROM 1999 THRU 2001

☐

CORRESPONDENCE LOCATED
IN OVERFLOW FILE

PERMIT OVERFLOW

**METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT**

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: Washington University School of Medicine
 Permit No: 5112262-00
 Premise Address: 660 S. Euclid, St. Louis, MO 63110
 Monitoring Period: ☐ (JAN-MAR) ☐ (APR-JUNE) ☒ (JULY-SEPT) ☐ (OCT-DEC)
 Samples Collected By: St. Louis Testing Laboratories
 Analyses Performed By: St. Louis Testing Laboratories

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS		001	003	005	
DATES ON WHICH SAMPLES WERE COLLECTED		Grab 8/15/01 Comp 8/15-16/01	Grab 8/15/01 Comp 8/15-16/01	Grab 8/14/01 Comp 8/14-15/01	
TIMES AT WHICH SAMPLES WERE COLLECTED		Grab 11:20 a.m. Comp 11:32 a.m.	Grab 11:48 a.m. Comp 11:58 a.m.	Grab 10:36 a.m. Comp 10:32 a.m.	
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C=composite, M=measured flow, E=estimated flow			UNITS
FLOW		E 55,950	E 3445	E 55,150	GPD
Biological Oxygen Demand		C 16	C 101	C 34	mg/L
Chemical Oxygen Demand		C 37	C 208	C 96	mg/L
Total Suspended Solids		C 20	C 65	C 33	mg/L
pH		G 7.62	G 8.24	G 8.24	std pH units
Oil & Grease		G 5	G 6	G 5	mg/L
Silver		C <0.05	C 0.06	C <0.05	mg/L
Asbestos		C <0.7	C <0.7	C <0.7	MSL
Arsenic		C <0.05	C <0.05	C <0.05	mg/L
Chromium		C <0.05	C <0.05	C <0.05	mg/L
Mercury		C <0.0005	C <0.0005	C <0.0005	mg/L
Total Cyanide (NA)		C <0.02	C 0.02	C <0.02	mg/L
Acrolein (KP)		C NDL (0.0004)	C NDL (0.0004)	C NDL (0.0004)	mg/L
Methylene Chloride (KP)		C NDL	C NDL	C (260)	mg/L (ppb)
Chloroform (KP)		C NDL	C NDL	C NDL	mg/L
Carbon Tetrachloride (KP)		C NDL <0.01	C NDL <0.01	C NDL <0.01	mg/L
Benzene (KP)		C NDL	C NDL	C NDL <0.01	mg/L
Toluene (KP)		C NDL	C NDL	C NDL	mg/L
Phenol (KP)		C NDL (0.012)	C NDL (0.012)	C NDL (0.012)	mg/L
2,4-Dinitrophenol (KP)		C NDL (0.012)	C NDL (0.012)	C NDL (0.012)	mg/L
Benzidine (KP)		C NDL (0.025)	C NDL (0.025)	C NDL (0.025)	mg/L
Temperature		G 34.5	G 32.0	G 32.4	°C

You must complete and sign the certification statements on the reverse side.

TTD 001 = 20.149 mld
 TTD 003 = 20.149 mld
 TTD 005 = 20.409 mld FG

OCT 23 2001
 OFFICE OF ENVIRONMENTAL PROTECTION

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

- A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.
- B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.
- C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:
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- ☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____.
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- ☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.
- F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:
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- G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:
- ☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. Everyone must complete the information under statement B and sign this report.

- A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:
- ☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Michael T. Kershaw

Title: Hazardous Materials Division Manager Telephone: (314) 362-6735

Signature: Michael T. Kershaw Date: 10/18/01

**METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT**

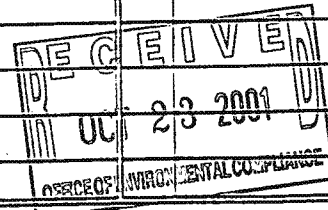
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 Samples Collected By: St. Louis Testing Laboratories
 Analyses Performed By: St. Louis Testing Laboratories

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS		006			
DATES ON WHICH SAMPLES WERE COLLECTED		G 8/14/01 C 8/14-19/01			
TIMES AT WHICH SAMPLES WERE COLLECTED		G 7:59 a.m. C 10:02 a.m.			
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C=composite, M=measured flow, E=estimated flow			
					UNITS
FLOW		E	2.665		GPD
Biological Oxygen Demand		C	54		mg/l
Chemical Oxygen Demand		C	101		mg/l
Total Suspended Solids		C	57		mg/l
pH		G	8.08		std. units
Oil & Grease		G	<5		mg/l
Temperature		G	28.8		C°
Silver		C	<0.05		mg/l
Asbestos		C	<0.7		MSL
Arsenic		C	<0.05		mg/l
Chromium		C	<0.05		mg/l
Mercury		C	<0.0005		mg/l
Total Cyanide		C	<0.02		mg/l
Acrolein		C	ND (<100)		µg/l
Methylene Chloride		C	ND		µg/l
Carbon Tetrachloride		C	ND		µg/l
Benzene		C	ND		µg/l
Toluene		C	ND 2.01		µg/l
Phenol		C	ND		mg/l
2,4-Dinitrophenol		C	ND (<.012)		mg/l
Benzidine		C	ND (<.012)		mg/l
Chloroform		C	ND (<.025)		µg/l



You must complete and sign the certification statements on the reverse side.

TTP 006 = <0.149 mg/l
FG

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

- A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.
- B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.
- C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:
- ☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.
- D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:
- ☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____.
- E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.
- F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:
- ☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.
- G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:
- ☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan, submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. Everyone must complete the information under statement B and sign this report.

- A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:
- ☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: _____

Title: Hazardous Materials Division Manager

Telephone: (314) 362-6735

Signature: _____

Michael T. Kershaw

Date: 10/19/01



2810 Clark Avenue • St. Louis, MO 63103-2574 • (314) 531-8080 • FAX (314) 531-8085

WASHINGTON UNIVERSITY
 Campus Box 8229
 660 South Euclid Ave.
 St. Louis, MO 63110

September 12, 2001
 Lab No. 01E-0958
 P.O. No. 29364J
 Page 1 of 2

Attention: Mike Kershaw

REPORT OF TESTS

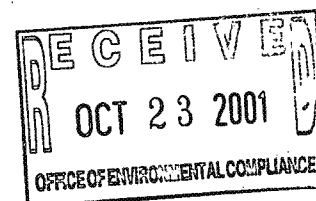
SAMPLE ID: WASTE WATER GRAB, PT. 001, 8/15/01 @ 11:20AM
 WASTE WATER COMPOSITE, PT. 001, 8/15-16/01 @ 11:32AM
 WASTE WATER GRAB, PT. 003, 8/15/01 @ 11:48AM
 WASTE WATER COMPOSITE, PT. 003, 8/15-16/01 @ 11:58AM
 WASTE WATER GRAB, PT. 005, 8/14/01 @ 10:26AM
 WASTE WATER COMPOSITE, PT. 005, 8/14-15/01 @ 10:32AM
 WASTE WATER GRAB, PT. 006, 8/14/01 @ 9:59AM
 WASTE WATER COMPOSITE, PT. 006, 8/14-15/01 @ 10:02AM

RESULTS: mg/L Except As Noted

ANALYTE	001	003	005	006	ML	METHOD NUMBER
Biological Oxygen Demand (C)	16	101	34	54	10	405.1
Chemical Oxygen Demand (C)	37	208	96	101	10	410.4
Total Suspended Solids (C)	20	65	33	57	5	160.2
pH (Std. pH Units)(G)	7.62	8.24	8.24	8.08	---	150.1
Oil & Grease (G)	5	6	5	<5	5	1664
Temperature (G)	34.5	32.0	33.4	28.8	---	170.1
Silver	<0.05	0.06	<0.05	<0.05	0.05	200.7
Asbestos (MSL)	<0.7	<0.7	<0.7	<0.7	0.7	SM 2570
Arsenic	<0.05	<0.05	<0.05	<0.05	0.05	200.7
Chromium	<0.05	<0.05	<0.05	<0.05	0.05	200.7
Mercury	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	245.1
Total Cyanide	<0.02	0.02	<0.02	<0.02	0.02	335.2

MSL: Millions Structures per Liter

ML: Minimum Quantitative Limit



AN OFFICIAL COPY OF TEST REPORT WILL BE PROVIDED BY THIS LABORATORY ON REQUEST. DO NOT REPRODUCE.
 NOT OFFICIAL WITHOUT THE RAISED SEAL OF ST. LOUIS TESTING LABORATORIES, INC.
 SEE REVERSE FOR CONDITIONS.



2810 Clark Avenue • St. Louis, MO 63103-2574 • (314) 531-8080 • FAX (314) 531-8085

WASHINGTON UNIVERSITY
Campus Box 8229
660 South Euclid Ave.
St. Louis, MO 63110

September 12, 2001
Lab No. 01E-0958
P.O. No. 29364J
Page 2 of 2

Attention: Mike Kershaw

RESULTS: $\mu\text{g/L}$ or Parts per Billion (PPB)

VOLATILES EPA 600 METHOD 624

ANALYTE	001	003	005	006	MDL
Acrolein	ND	ND	ND	ND	100.0
Methylene Chloride	ND	ND	260	ND	5.0
Chloroform	ND	ND	ND	ND	5.0
Carbon Tetrachloride	ND	ND	ND	ND	5.0
Benzene	ND	ND	ND	ND	5.0
Toluene	ND	ND	ND	ND	5.0

RESULTS: mg/L or Parts per Million (PPM)

SEMI-VOLATILES EPA 600 METHOD 625

ANALYTE	001	003	005	006	MDL
Phenol	ND	ND	ND	ND	0.012
2,4-Dinitrophenol	ND	ND	ND	ND	0.012
Benzidine	ND	ND	ND	ND	0.025

ND: Not Detected / MDL: Method Detection Limit

identification of tested specimens provided by the client.

CSD/crh

Carmen S. DeBlass, Director
Environmental Testing



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SEE REVERSE FOR CONDITIONS.



MSD 044047

22/11/2019

PART I: IDENTIFYING INFORMATION

Permit No: 5112262-00

Monitoring Period: ☐ (JAN-MAR) ☒ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)

Analyses Performed By: St. Louis Testing Laboratories

PART II: ANALYTICAL RESULTS OF SELF MONITORING

RECEIVED
JUL 25 2001
OFFICE OF ENVIRONMENTAL COMPLIANCE

1

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

- A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:
☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.
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☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.
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- G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:
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PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. Everyone must complete the information under statement B and sign this report.

- A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:
☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Michael T. Kershaw
 Title: Hazardous Materials Division Manager Telephone: (314) 362-6735
 Signature: [Signature] Date: 6/19/01

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

Company Name: Washington University School of Medicine
Permit No: 5112262-00
Premise Address: 660 S. Euclid, St. Louis, MO 63110
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[illegible]

↑

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Print or type name of signing official: Michael T. Kershaw

Title: Hazardous Materials Division Manager Telephone: (314) 362-6735

Signature: Mike Kershaw Date: 6/19/01

Company Name: Washington University School of Medicine - bldgs west of Euclid

Premise Address: 660 S. Euclid St Louis MO 63110

Reporting Period: ☐ (JAN-MAR) ☒ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
H-3	5.284
P-32	0.479
S-35	0.255
C-14	0.120
I-125	0.063
P-33	0.036
TOTAL ACTIVITY DISCHARGED:	6.237 mCi

Place your initials in the box under item A.

Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

DS

I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CFR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print/type name of signing official: Daniel J Szatkowski

Title: Assistant Radiation Safety Officer

Telephone: (314) 362-3479

Signature: Daniel J. Luchessa

Date: 7-17-01

PMT FILE

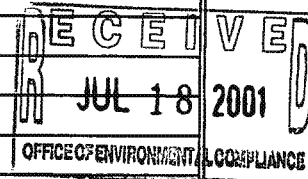
METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

PART I: IDENTIFYING INFORMATION

Company Name: Washington University School of Medicine - bldgs east of Euclid
Permit No: 51122142-00
Premise Address: 660 S. Euclid St Louis MO 63110
Reporting Period: ☐ (JAN-MAR) ☒ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
H-3	60.940
P-32	0.642
S-35	0.097
C-14	9.611
I-125	0.041
TOTAL ACTIVITY DISCHARGED:	71.331 mCi



PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

DJS I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, have been met for the period covered by this report.

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Print/type name of signing official: Daniel J Szatkowski
Title: Assistant Radiation Safety Officer Telephone: (314) 362-3479
Signature: Daniel J Szatkowski Date: 7-17-01

radrpt.doc 2/00



Washington University in St. Louis

SCHOOL OF MEDICINE

Environmental Health & Safety

July 9, 2001

CERTIFIED MAIL

RE: Notice of Permit Violations
Department of Environmental Compliance
Metropolitan St. Louis Sewer District
10 East Grand Avenue
St. Louis, MO 63147-2913

To Whom It May Concern:

On June 18, 2001, Washington University School of Medicine received a correspondence from Mr. Fabian T. Grabski of the Metropolitan St. Louis Sewer District (MSD). The correspondence was a Notice of Permit Violations (NOPV) in reference to discharge permit number 51122162-00. In response to the NOPV, Mr. Grabski requested that Washington University School of Medicine (WUSM) submit a report of corrective actions taken by WUSM to correct the violation cited as Violations of Permit Terms/Conditions in the NOPV.

EXPLANATION OF VIOLATION

The NOPV was issued by the Metropolitan St. Louis Sewer District (MSD) in response to a violation of discharge limitations located at Sample Point 006 for Oil & Grease.

CORRECTIVE ACTIONS

Washington University School of Medicine has taken additional samples from the sample point. A total of four samples from Sample Point 006 have been analyzed for Oil & Grease in the six-month period from January 1, 2001 to June 30, 2001. Of the four samples, one was above the permit limit. Thus, less than 33% of the samples were above the limit during the six-month period.

An ongoing investigation will continue in an effort to identify the source of the oil and grease found at Sample Point 006.

If you have any questions or further concerns, please contact me at 362-6735.

Sincerely,

Michael T. Kershaw

Washington University School of Medicine at Washington University Medical Center, Campus Box 8229
660 S. Euclid Avenue, St. Louis, Missouri 63110-1093, (314) 362-6816, Fax (314) 362-1995,
esafety@msnotes.wustl.edu, www.ehs.wustl.edu

JUL 16 2001

MSD 044055

PMT FILE
#51122162-00

✓
7/16/01
Amin

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

Company Name: Washington University School of Medicine
Permit No: 5112262-00
Premise Address: 660 S. Euclid, St. Louis, MO 63110
Monitoring Period: ☐ (JAN-MAR) ☐ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)
Samples Collected By: St. Louis Testing Laboratories
Analyses Performed By: St. Louis Testing Laboratories

[illegible]

JUL 10

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

- A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.
- B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.
- C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:
- ☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.
- D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:
- ☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____.
- E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.
- F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:
- ☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.
- G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:
- ☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. Everyone must complete the information under statement B and sign this report.

- A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:
- ☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

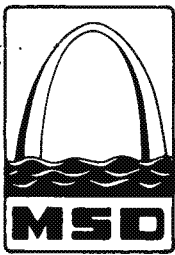
B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Michael T. Kershaw

Title: Hazardous Materials Division Manager Telephone: (314) 362-6735

Signature: Michael T. Kershaw Date: 7/12/01



**Metropolitan
St. Louis Sewer
District**

Office of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

June 18, 2001

Michael T. Kershaw
Hazardous Materials Division Manager
WASHINGTON UNIVERSITY MEDICAL SCHOOL
660 S. Euclid Avenue
Campus Box 8229
St. Louis, MO 63110

RE: NOTICE OF PERMIT VIOLATIONS
Discharge Permit No: 51122162-00
For premise at: 660 S. Euclid Avenue

Dear Mr. Kershaw:

Thank you for your June 11, 2001 letter advising us of the results of recent monitoring of your wastewater discharge. That letter accompanied the first quarter 2001 self-monitoring report required under the terms of the above referenced permit. The following violations of permit limitations, terms or conditions were identified:

VIOLATIONS OF DISCHARGE LIMITATIONS:

<u>DATE</u>	<u>TIME</u>	<u>SAMP PT</u>	<u>SAMPLE TYPE</u>	<u>PARAMETER</u>	<u>PERMIT LIMITATION</u>	<u>LIMIT TYPE</u>	<u>VALUE FOUND</u>
02-07-01	0925	006	Grab	Oil & Grease (T)	200 mg/l	IN	740 mg/l**

(T) = Total substance
mg/l = milligrams per liter
IN = Instantaneous

REQUIRED ACTION/RESPONSE:

Pursuant to Article VIII, Section 4.C of MSD Ordinance 8472, you are required to resample the discharge and to submit the results of analyses to the District, within thirty (30) days of your first becoming aware of the violation. Resampling must be performed for Oil & Grease at sampling point 006.

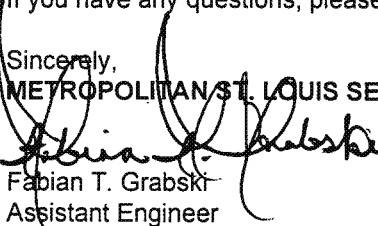
Submit a report of corrective actions, which you have initiated to ensure compliance with the permitted discharge limitation for Oil & Grease.

Refer to the enclosure for information on potential enforcement actions should noncompliance continue. The enclosure also explains the meaning of any asterisks which appear in the Value Reported column above. You should consider the percentages applicable to Significant Noncompliance when planning for additional sampling.

Please submit your response on the above items by July 16, 2001.

If you have any questions, please contact me at 436-8756.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT


Fabian T. Grabski
Assistant Engineer

bv
Enclosure
pc: suspense file

MSD 044058



Washington University in St. Louis

SCHOOL OF MEDICINE

Environmental Health & Safety

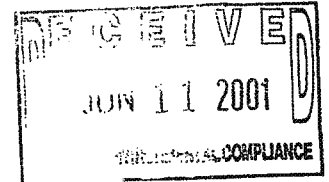
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June 5, 2001

CERTIFIED MAIL

RE: Notice of Permit Violations

Department of Environmental Compliance
Metropolitan St. Louis Sewer District
10 East Grand Avenue
St. Louis, MO 63147-2913



To Whom It May Concern:

On May 18, 2001, Washington University School of Medicine received a correspondence from Mr. Fabian T. Grabski of the Metropolitan St. Louis Sewer District (MSD). The correspondence was a Notice of Permit Violations (NOPV) in reference to discharge permit number 51122162-00. In response to the NOPV, Mr. Grabski requested that Washington University School of Medicine (WUSM) submit a report of corrective actions taken by WUSM to correct the violation cited as Violations of Permit Terms/Conditions in the NOPV.

EXPLANATION OF VIOLATION

The NOPV was issued by the Metropolitan St. Louis Sewer District (MSD) because of an alleged failure to receive the WUSM quarterly report of analysis for regulated substances as required by the discharge permit referenced above. The sampling and analysis required by MSD was completed during the quarter and documented by St. Louis Testing Laboratories, Incorporated. However, it is not known why the report did not reach MSD as required.

CORRECTIVE ACTIONS

Washington University School of Medicine will take corrective actions to ensure compliance with the Industrial Wastewater Discharge permit. The corrective actions will include the following:

- Submit a completed report and signed certification to MSD using the analytical results obtained for the quarter in question

Washington University School of Medicine at Washington University Medical Center, Campus Box 8229
660 S. Euclid Avenue, St. Louis, Missouri 63110-1093, (314) 362-6816, Fax (314) 362-1995,
esafety@msnotes.wustl.edu, www.ehs.wustl.edu

MSD 044059

WASHINGTON UNIVERSITY SCHOOL OF MEDICINE
ENVIRONMENTAL SAFETY OFFICE

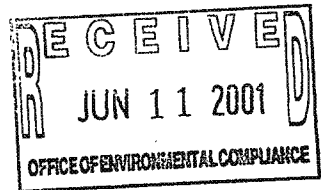
- Ensure that future reports reach MSD by sending each report as certified mail
- Ensure that each report is sent prior to the deadline for each quarter by setting up an automatic internal checks and balances system

If you have any questions or further concerns, please contact me at 362-6735.

Sincerely,



Michael T. Kershaw



METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: Washington University School of Medicine

Permit No: 5122/62-00

Premise Address: 660 S. Euclid, St. Louis, MO 63110

Monitoring Period: ☒ (JAN-MAR) ☐ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)

Samples Collected By: St. Louis Testing Laboratory

Analyses Performed By: St. Louis Testing Laboratory

PART II: ANALYTICAL RESULTS OF SELF MONITORING

[illegible]

You must complete and sign the certification statements on the reverse side.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

- A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.
- B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.
- C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:
- ☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.
- D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:
- ☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____.
- E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.
- F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:
- ☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.
- G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:
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PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. Everyone must complete the information under statement B and sign this report.

- A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:
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B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Mike Kershaw

Title: Hazardous Materials Manager

Telephone: 314-362-6735

Signature: Mike Kershaw

Date: 5/23/01

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: Washington University School of Medicine

Permit No: 5/22/62-00

Premise Address: 660 S. Euclid, St. Louis, MO 63116

Monitoring Period: ☒ (JAN-MAR) ☐ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)

Samples Collected By: St. Louis Testing Laboratory

Analyses Performed By: St. Louis Testing Laboratory

PART II: ANALYTICAL RESULTS OF SELF MONITORING

[illegible]

You must complete and sign the certification statements on the reverse side.

PART III: SPECIAL CERTIFICATION STATEMENTS

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PART IV: GENERAL CERTIFICATION STATEMENTS

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- A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:
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Print or type name of signing official: Mike Kershaw

Title: Hazardous Materials Division Manager Telephone: 314-362-6735

Signature: M. Kershaw Date: 5/23/01

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

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PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. Everyone must complete the information under statement B and sign this report.

- A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:
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Print or type name of signing official: Mike Kershaw

Title: Hazardous Materials Manager

Telephone: 314-362-6735

Signature: Mike Kershaw

Date: 5/23/01



**Metropolitan
St. Louis Sewer
District**

Office of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

May 14, 2001

Bruce Backus
Director of EH&S

WASHINGTON UNIVERSITY MEDICAL SCHOOL
660 S. Euclid Avenue
Campus Box 8229
St. Louis, MO 63110

RE: NOTICE OF PERMIT VIOLATIONS
Discharge Permit No: 51122162-00
For premise at: 660 S. Euclid Avenue

Dear Mr. Backus:

Under the terms and conditions of the above referenced permit, you are required to self-monitor the discharge at the identified sampling points. Monitoring is to be performed for the parameters listed and at the frequency specified in the permit. The results are to be reported quarterly. Your report for first quarter of 2001 was due by April 28, 2001.

VIOLATIONS OF PERMIT TERMS/CONDITIONS:

The first quarter self-monitoring report has not been received by the District. This is in violation of permit standard condition I.A.1 which requires sampling and analyses for all regulated substances at the frequencies specified at your sampling points. Since no report was submitted, you did not satisfy the first quarter's reporting requirements.

The reporting requirements of your permit also includes completing a certain certification for each quarter. Even if sampling and analytical requirements can not be met, the report should still be submitted with the applicable certification completed. The violation will then be recorded as an incomplete report rather than "no report".

REQUIRED ACTION/RESPONSE:

Submit the first quarter 2001 report with the applicable certifications completed, any available first quarter self-monitoring data, and a report of corrective actions, which you have initiated, to ensure that the reporting requirements will be met in future reporting quarters.

Failure to perform the monitoring and reporting requirements of your permit places your company in Significant Noncompliance (SNC), as defined in District ordinance 8472 and federal pretreatment regulations 40 CFR 403. SNC companies are subject to enforcement action by the District. At a minimum, the District is required to list SNC companies in an annual newspaper publication.

Please submit your first quarter report and corrective action response by June 11, 2001. If you have any questions, please contact me at 436-8756.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT


Fabian T. Grabski
Assistant Engineer

bv
pc: suspense file

PART I: IDENTIFYING INFORMATION

Permit No: 51122162-00

Reporting Period: ☒ (JAN-MAR) ☐ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
H-3	4.568
P-32	0.785
S-35	0.326
C-14	0.112
T-125	0.134
P-33	0.092
TOTAL ACTIVITY DISCHARGED:	6.017 mCi

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.

Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

DS I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print/type name of signing official: Daniel J Szatkowski

Title: Assistant Radiation Safety Officer

Telephone: (314) 362-3479

Signature: Daniel J. Guthrie

Date: 4-24-01

✓ FL

Company Name: Washington University School of Medicine - bldgs **Environment** Euclid

Premise Address: 660 S. Euclid Ave. St Louis MO 63110

Reporting Period: ☒ (JAN-MAR) ☐ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
H-3	43.501
P-32	0.677
S-35	0.203
C-14	0.225
I-125	0.008
TOTAL ACTIVITY DISCHARGED:	44.614 mCi

✓ FC
1/31/01
1/min

PART I: IDENTIFYING INFORMATION

Premise Address: 660 S. Euclid, St. Louis, MO 63110

Samples Collected By: St. Louis Testing Laboratories

Analyses Performed By: St. Louis Testing Laboratories

[illegible]

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PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

- A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.
- B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.
- C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:
- ☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.
- D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:
- ☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____.
- E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.
- F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:
- ☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.
- G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:
- ☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. Everyone must complete the information under statement B and sign this report.

- A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:
- ☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Michael T. Kershaw

Title: Hazardous Materials Division Manager Telephone: (314) 362-6735

Signature: M. T. Ke Date: 1/29/01

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART II: ANALYTICAL RESULTS OF SELF MONITORING

Environmental Compliance

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

- A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.
- B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.
- C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:
- ☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.
- D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:
- ☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____.
- E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.
- F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:
- ☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.
- G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:
- ☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. Everyone must complete the information under statement B and sign this report.

- A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:
- ☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Michael T. Kershaw

Title: Hazardous Materials Division Manager Telephone: (314) 362-6735

Signature: Mik Re Date: 1/29/01



School of Medicine

ENVIRONMENTAL HEALTH
& SAFETY

November 15, 2000

CERTIFIED MAIL

RE: Notice of Permit Violations

Department of Environmental Compliance
Metropolitan St. Louis Sewer District
10 East Grand Avenue
St. Louis, MO 63147-2913

To Whom It May Concern:

On November 15, 2000, Washington University School of Medicine received a correspondence from Mr. Fabian T. Grabski of the Metropolitan St. Louis Sewer District (MSD). The correspondence was a Notice of Permit Violations (NOPV) in reference to discharge permit number 51122162-00. In response to the NOPV, Mr. Grabski requested that Washington University School of Medicine (WUSM) submit a report of corrective actions taken by WUSM to correct the violation cited as Violations of Permit Terms/Conditions in the NOPV.

EXPLANATION OF VIOLATION

Over the course of the past year, sampling has taken place from sample point 004 on the Washington University School of Medicine campus. In January of 2000, analysis from sample point 004 showed high levels of oil and grease. Because it was highly unlikely that the building served by sample point 004 discharged the oil and grease, I was suspicious that the sample point contained effluent from other non-university sources. Thus, I showed an interest in changing the sample point for the building in question. At the annual Metropolitan Sewer District Inspection, James Goodall, MSD Environmental Engineering Associate, agreed to amend the Industrial Wastewater Discharge permit to include a sample point that served only the building for which we wanted to sample. This sample point was named sample point 006. After this change, I physically showed the new sample point to the sampling technician from St. Louis Testing Laboratory during his sampling for the third quarter of 2000. However, in error, I told them that the sample point was now sample point 004. Thus, the results listed in the quarterly self-monitoring report for sample point 004 are in actuality results for the analysis of sample point 006.

Washington University School of Medicine
at Washington University Medical Center
Campus Box 8229, 660 South Euclid Avenue
St. Louis, Missouri 63110
(314) 362-6816 FAX: (314) 362-1995
www.ehs.wustl.edu
esafety@msnotes.wustl.edu

RECEIVED

NOV 16 2000

Environmental Compliance

November 16, 2000

CORECTIVE ACTIONS

Washington University School of Medicine will take corrective actions to ensure compliance with the Industrial Wastewater Discharge permit. The corrective actions will include the following:

- Notify St. Louis Testing Laboratory of the change in name of the sampling point
- Ensure that the analytical results for sample point 006 will be identified as such on the quarterly analysis report

If you have any questions or further concerns, please contact me at 362-6735.

Sincerely,



Michael T. Kershaw

REC

NOV 17 2000

Environmental Compliance

AMT
51122162-00

AMT
5112262-00



**Metropolitan
St. Louis Sewer
District**

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

November 3, 2000

Michael T. Kershaw
Hazardous Materials Manager
WASHINGTON UNIVERSITY MEDICAL SCHOOL
660 S. Euclid Avenue
Campus Box 8229
St. Louis, MO 63110

RE: NOTICE OF PERMIT VIOLATIONS

Discharge Permit No: 51122162-00
For premises at: 660 S. Euclid Avenue

We have reviewed the third quarter 2000 self-monitoring report you recently submitted to the District under the terms of the above referenced permit. The following violations of permit limitations, terms or conditions were identified:

VIOLATIONS OF PERMIT TERMS/CONDITIONS:

The report did not include results of analysis for sampling point 006. This is in violation of permit standard condition I.A.1 which requires sampling and analysis for all regulated substances at the frequencies specified. Pursuant to your permit, sampling point 006 requires monitoring and reporting on a quarterly bases. Please note that sampling point 006 replaced sampling point 004 via the District's July 1, 2000 permit modification for the above premise.

REQUIRED ACTION/RESPONSE:

Submit a report of corrective actions, which you have initiated, to ensure that the sampling and analytical requirements will be met in future reporting quarters. Please submit this response by November 27, 2000. Additionally, please monitor and report sampling points 001, 003, 005, and 006 during fourth quarter 2000.

Failure to perform the monitoring and reporting requirements of your permit places your company in Significant Noncompliance (SNC), as defined in District ordinance 8472 and federal pretreatment regulations 40 CFR 403. SNC companies are subject to enforcement action by the District. At a minimum, the District is required to list SNC companies in an annual newspaper publication.

If you have any questions, please contact me at 436-8756.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT


Fabian T. Grabski
Assistant Engineer

dss

pc: suspense file

PART I: IDENTIFYING INFORMATION

Permit No: 51122162-00

Premise Address: 660 S. Euclid, St. Louis MO 63110

Monitoring Period: ☐ (JAN-MAR) ☐ (APR-JUNE) ☒ (JULY-SEPT) ☐ (OCT-DEC)

Samples Collected By: St. Louis Testing Laboratories

Analyses Performed By: St. Louis Testing Laboratories

PART II: ANALYTICAL RESULTS OF SELF MONITORING

RECEIVED
NOV 1 2000
Environmental Compliance

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11/3/00

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

- A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.
- B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.
- C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:
- ☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.
- D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:
- ☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____.
- E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.
- F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:
- ☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.
- G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:
- ☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. Everyone must complete the information under statement B and sign this report.

- A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:
- ☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Mike Kershaw

Title: Hazardous Materials Manager

Telephone: 14/31/00 314-362-6735

Signature: Mike Kershaw

Date: 10/31/00

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

Company Name: Washington University School of Medicine
Permit No: 51122162-00
Premise Address: 660 S. Euclid, St. Louis MO 63110
Monitoring Period: ☐ (JAN-MAR) ☐ (APR-JUNE) ☒ (JULY-SEPT) ☐ (OCT-DEC)
Samples Collected By: St. Louis Testing Laboratories
Analyses Performed By: St. Louis Testing Laboratories

[illegible]

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* $\leq 0.2 \text{ ms/L}$ FG 11/13/14

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

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- C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:
- ☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.
- D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:
- ☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____.
- E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.
- F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:
- ☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.
- G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:
- ☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. Everyone must complete the information under statement B and sign this report.

- A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:
- ☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

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I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Mike Kershaw

Title: Hazardous Materials Mgr.

Telephone: 314-362-6735

Signature: Mike Kershaw

Date: 10/31/00

MSD 044082

MSD 044083

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

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- ☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.
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- ☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____.
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PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. Everyone must complete the information under statement B and sign this report.

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B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Michael T. Kershaw

Title: Hazardous Materials Division Manager Telephone: (314) 362-6735

Signature: Michael T. Kershaw Date: 7/17/00

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

Company Name: Washington University School of Medicine
Permit No: 51122162-00
Premise Address: 660 S. Euclid, St. Louis, MO 63110
Monitoring Period: ☐ (JAN-MAR) ☒ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)
Samples Collected By: St. Louis Testing Laboratories
Analyses Performed By: St. Louis Testing Laboratories

[illegible]

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PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

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- ☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.
- C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:
- ☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.
- D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:
- ☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____.
- E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.
- F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:
- ☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.
- G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:
- ☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. Everyone must complete the information under statement B and sign this report.

- A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:
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B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Michael T. Keishaw

Title: Hazardous Materials Division Manager Telephone: (314) 362-6735

Signature: Michael T. Keishaw Date: 7/17/00

PART I: IDENTIFYING INFORMATION

Permit No: 5122162-00

Monitoring Period: ☒ (JAN-MAR) ☐ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)

Analyses Performed By: St. Louis Testing Laboratories

[illegible]

* G collected on different day (2/2).
Explained diff between G + C
= 4/17/00 tel con v

APR 14 2000

Environmental Compliance

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

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Print or type name of signing official: Michael T. Kershaw

Title: Hazardous Materials Manager

Telephone: 314-362-6735

Signature: ML RL

Date: 4/10/00

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: Washington University School of Medicine

Permit No: 51122162-00

Premise Address: 660 S. Euclid St. Louis, MO

Monitoring Period: ☒ (JAN-MAR) ☐ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)

Samples Collected By: St. Louis Testing Laboratories

Analyses Performed By: St. Louis Testing Laboratories

PART II: ANALYTICAL RESULTS OF SELF MONITORING

[illegible]

You must complete and sign the certification statements on the reverse side.

APR 14 2000
Environmental Compliance

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

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Print or type name of signing official: Michael T. Kershaw

Title: Hazardous Materials Manager

Telephone: 314-362-6735

Signature: MLK

Date: 4/10/00



**Metropolitan
St. Louis Sewer
District**

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

February 8, 2000

Daniel Szatkowski
WASHINGTON UNIVERSITY SCHOOL OF MEDICINE
660 S. Euclid Ave.
St. Louis, MO 63110

Re: Barnes-Jewish Hospital-North Campus
Barnes-Jewish Hospital-South Campus
St. Louis Children's Hospital
Washington University Hilltop Campus
Washington University Medical School (East of Euclid)
Washington University Medical School (West of Euclid)

Dear Mr. Szatkowski:

As you may be aware, the Metropolitan St. Louis Sewer District prohibits the discharge of radioactive material to the sewer system, except those discharges specifically approved by the District. The facilities referenced above have such approvals. As part of the approval, you are required to complete and submit Industrial User Radioactive Materials Discharge Reports each quarter.

We have recently revised the Discharge Report. Under Part III.A of the report, the Certification of Compliance with State and Federal Regulations has been modified so that now only a single certification is required. The previous version of the report required two separate certifications, which resulted in some companies failing to make the correct certification.

A copy of the revised report is enclosed for your use. Please begin using the revised report immediately. You should discard all copies of the previous version.

If you have any questions, please contact me at 314-436-8717.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Douglas M. Mendoza, P.E.
Industrial Waste Engineer

Enclosure - revised Radioactive Discharge Report

pc Permits Unit



Washington
WASHINGTON UNIVERSITY IN ST. LOUIS

School of Medicine

ENVIRONMENTAL HEALTH
& SAFETY

February 3, 2000

CERTIFIED MAIL

RE: Notice of Permit Violations

Department of Environmental Compliance
Metropolitan St. Louis Sewer District
10 East Grand Avenue
St. Louis, MO 63147-2913

To Whom It May Concern:

On January 13, 2000, Washington University School of Medicine received a correspondence from Mr. Fabian T. Grabski of the Metropolitan St. Louis Sewer District (MSD). The correspondence was a Notice of Permit Violations (NOPV) in reference to discharge permit number 51122162-00. In response to the NOPV, Mr. Grabski requested that Washington University School of Medicine (WUSM) submit a report of corrective actions taken by WUSM to correct each violation cited as Violations of Discharge Limits in the NOPV. In addition, he requested submission of the results from re-sampling of sample points 003 and 004 for silver and oil & grease respectively.

CORRECTIVE ACTIONS

The wastewater from sample point 003 exceeded the MSD limit for silver. The most probable source for silver in the area served by sample point 003 is silver contaminated photographic fixer solution. In order to correct the potential problem, WUSM personnel visited each laboratory in the area that developed film or x-rays of any type. At each of these sites, WUSM personnel explained to at least one contact person, the proper methods of photographic chemical waste management and the consequences of improper disposal via sanitary sewer. The location of each developing area was documented along with the type of equipment, waste disposal method, contact person, and telephone number. This data is available for submission to MSD upon request.

The wastewater from sample point 004 exceeded the MSD limit for oil & grease. There is only one WUSM building that produces the effluent released at this sample point. The supervisors for the employees in the building were questioned about disposal of any possible oil or grease via sanitary sewer. Upon investigation into this matter, no evidence or record of

Washington University School of Medicine
at Washington University Medical Center
Campus Box 8229, 660 South Euclid Avenue
St. Louis, Missouri 63110
(314) 362-6816 FAX: (314) 362-1995
www.ehs.wustl.edu
esafety@msnotes.wustl.edu

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Environmental Control

MSD 044093

February 3, 2000

improper release was found. In addition, each employee that works in the building was notified of the results of the sampling and trained on MSD requirements. Finally, when the re-sampling was being performed, I was present to ensure that the effluent from the building was properly sampled. It is possible the previous sample was taken from the main line as opposed to the line that flowed from the building.

RE-SAMPLING

As required by MSD, sample point 003 was re-sampled using a 24-hour composite and analyzed for silver concentration. In addition, sample point 004 was re-sampled using a grab and analyzed for oil & grease. See the attached copy of analysis for details.

RUSULTS

Sample point 003 was found to have silver levels at a concentration of 0.26 mg/l.

Sample point 004 was found to have oil & grease levels at a concentration of 102 mg/l.

CONCLUSIONS

The results of the re-sampling show that the sample points in question are currently in compliance with MSD ordinance 8472 discharge limits.

WUSM is extremely interested in both staying in compliance and being a leader in environmental stewardship. We will continue to make every effort to maintain compliance and to increase employee awareness of environmental issues. In addition, we will continue to investigate the previous violations with the intention of avoiding future violations.

If you have any questions or need further information please contact me at (314) 362-6735.

Sincerely,



Michael T. Kershaw

Enc: 1

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FEB - 7 2000

Environmental Control



2810 Clark Avenue • St. Louis, MO 63103-2574 • (314) 531-8080 • FAX (314) 531-8085

WASHINGTON UNIVERSITY
Campus Box 8229
660 South Euclid Ave.
St. Louis, MO 63110

January 31, 2000
Lab No. 00E-0090
Invoice No. 8076
P.O. No. 74262H
Page 1 of 1

Attention: Mike Kershaw

REPORT OF TESTS


SAMPLE ID: WASTE WATER, PT. 004 GRAB, 1-27-00, 9:15 A.M.
WASTE WATER, PT. 003 COMPOSITE, 1/27-28/00, 9:45 A.M.

RESULTS: mg/L

ANALYTE	004	003	MQL	METHOD NUMBER
Oil & Grease	102	---	5	1664
Silver	---	0.26	0.05	200.7

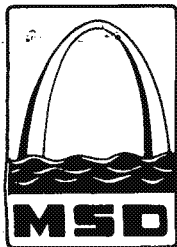
MQL: Minimum Quantitative Limit

CSD/mrm


Carmen S. DeBlase, Director
Environmental Testing
FEB - 7 2000
Environmental Compliance



AN OFFICIAL COPY OF TEST REPORT WILL BE PROVIDED BY THIS LABORATORY ON REQUEST. DO NOT REPRODUCE.
NOT OFFICIAL WITHOUT THE RAISED SEAL OF ST. LOUIS TESTING LABORATORIES, INC.
SEE REVERSE FOR CONDITIONS.



**Metropolitan
St. Louis Sewer
District**

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

January 12, 2000

Michael T. Kershaw
Hazardous Materials Manager
WASHINGTON UNIVERSITY MEDICAL SCHOOL
660 S. Euclid Avenue
Campus Box 8229
St. Louis, MO 63110

RE: NOTICE OF PERMIT VIOLATIONS

Discharge Permit No: 51122162-00
For premise at: 660 S. Euclid Avenue

Dear Mr. Kershaw:

We have reviewed the fourth quarter 1999 self-monitoring report you recently submitted to the District under the terms of the above referenced permit. The following violations of permit limitations, terms or conditions were identified:

VIOLATIONS OF DISCHARGE LIMITATIONS:

DATE	TIME	SAMP PT	SAMPLE TYPE	PARAMETER	MSD ORD. 8472 LIMIT	LIMIT TYPE	VALUE FOUND
12-15-99	1330	003	24-hr comp	Silver (T)	0.5 mg/l	DA	0.68 mg/l**
12-15-99	1045	004	Grab	Oil & Grease (T)	200 mg/l	IN	240 mg/l

(T) = Total substance
mg/l = milligrams per liter
DA = Daily Average
IN = Instantaneous

REQUIRED ACTION/RESPONSE:

Pursuant to Section 403.12 (g) (2) of the federal pretreatment regulations and Article VIII, Section 4.C of MSD Ordinance 8472, you are required to resample the discharge and to submit the results of analyses to the District, within thirty (30) days of your first becoming aware of the violation. Resampling must be performed at sampling point 003 for Silver and at sampling point 004 for Oil & Grease

Submit a report of corrective actions, which you have initiated to ensure compliance with the permitted discharge limitations for Silver and Oil & Grease.

Refer to the enclosure for information on potential enforcement actions should noncompliance continue. The enclosure also explains the meaning of any asterisks which appear in the Value Reported column above. You should consider the percentages applicable to Significant Noncompliance when planning for additional sampling.

*1/14/00 Gave Mr. Kershaw an explanation of TRL.
Will send letter + resample.*

Page 2
Washington University Medical School
January 12, 2000

Please submit your response on the above items by February 7, 2000.

If you have any questions, please contact me at 436-8756.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT



Fabian T. Grabski
Assistant Engineer

Idl

Enclosure

pc: Suspense file

1/11/00
Ann

PART I: IDENTIFYING INFORMATION

Analyses Performed By: St. Louis Testing Laboratories

PART II: ANALYTICAL RESULTS OF SELF MONITORING

[illegible]

JAN 11 2000

*ALL SAMPLES ARE 24 HOUR COMPS, HOWEVER, PH, O₂, & TEMP WERE NOT COMPOSITES BUT RATHER GRABS.
PURSUANT TO 111100 CALL w/ MR. KERSHAW

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

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Print or type name of signing official: Michael T. Kershaw

Title: Hazardous Materials Manager Telephone: (314) 362-6735

Signature: Michael T. Kershaw Date: 01/06/00

Certified P074 2012908

SMF 1093

MSD 044099

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: Washington University School of Medicine

Permit No: 51122162-00

Premise Address: 660 S. Euclid, Box 8009, St. Louis, MO 63110

Monitoring Period: ☐ (JAN-MAR) ☐ (APR-JUNE) ☐ (JULY-SEPT) ☒ (OCT-DEC)

Samples Collected By: St. Louis Testing Laboratories

Analyses Performed By: St. Louis Testing Laboratories

PART II: ANALYTICAL RESULTS OF SELF MONITORING

[illegible]

You must complete and sign the certification statements on the reverse side.

RECEIVED

JAN 11 2000

Environmental Compliance

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Print or type name of signing official: Michael T. Kershaw

Title: Hazardous Materials Manager

Telephone: (314) 362-6735

Signature: Michael T. Kershaw

Date: 01/06/00

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: Washington University School of Medicine

Permit No: 51122162-00

Premise Address: 660 S. Euclid, St. Louis MO 63110

Monitoring Period: ☐ (JAN-MAR) ☐ (APR-JUNE) ☒ (JULY-SEPT) ☐ (OCT-DEC)

Samples Collected By: St. Louis Testing Laboratories

Analyses Performed By: St. Louis Testing Laboratories

PART II: ANALYTICAL RESULTS OF SELF MONITORING

[illegible]

You must complete and sign the certification statements on the reverse side.

$$n_{O_2} = 0.17 \text{ mole}$$
$$\pi_{O_2} = 0.17 \text{ mol}$$
$$\pi_{Q_{out}} = \leq 0.192 \text{ mgl}$$

SEE ATT.

DATA. 1

FG 10/19/99

OCT 19 1999

Environment & Compliance

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

- A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.
- B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.
- C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:
- ☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.
- D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:
- ☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____.
- E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.
- F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:
- ☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.
- G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:
- ☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. Everyone must complete the information under statement B and sign this report.

- A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:
- ☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Michael T. Kershaw

Title: Hazardous Materials Division Manager Telephone: 314/362-6735

Signature: Michael T. Kershaw Date: 10/1/99

Certified P 074 20² 1 667

SMF 1093

MSD 044105

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD 044106

$\pi_0 = 20.17 \text{ m}^4$ FG 10/19/99

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

- A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.
- B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.
- C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:
- ☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.
- D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:
- ☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____.
- E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification:
- ☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.
- F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:
- ☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.
- G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:
- ☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. Everyone must complete the information under statement B and sign this report.

- A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:
- ☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Michael T. Kershaw

Title: Hazardous Materials Division Manager

Telephone: 314/362-6735

Signature: Michael T. Kershaw

Date: 10/11/99

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St. Louis Testing Laboratories
INCORPORATED

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WASHINGTON UNIVERSITY

Attention: Mike Kershaw

October 5, 1999

Lab No. 99E-1010

Page 2 of 12

TTO₀₁ = <0.17 mblTTO₀₃ = <0.17 mblFG
10/19/99

RESULTS: µg/l

EPA 600 METHOD 624 VOLATILE ORGANICS

ANALYTE	001	003	MDL
Dichlorodifluoromethane	ND	ND	10.0
Chloromethane (Methyl chloride)	ND	ND	10.0
Vinyl Chloride	ND	ND	5.0
Bromomethane	ND	ND	10.0
Chloroethane	ND	ND	10.0
Trichlorofluoromethane	ND	ND	5.0
1,1'-Oxybis-ethane	ND	ND	5.0
Acrolein (KP)	ND	ND	100.0
Acetone	ND	ND	10.0
1,1-Dichloroethene	ND	ND	5.0
Iodomethane	ND	ND	5.0
Allyl Chloride	ND	ND	5.0
Carbon Disulfide	ND	ND	5.0
Methylene Chloride (KP)	ND	ND	5.0
Acrylonitrile	ND	ND	5.0
2-Methoxy-2-methylpropane	ND	ND	5.0
Hexane	ND	ND	5.0
trans-1,2-Dichloroethene	ND	ND	5.0
Vinyl Acetate	ND	ND	10.0

≤ 0.1

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Lab No. 99E-1010
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ANALYTE	001	003	MDL
1,1-Dichloroethane	ND	ND	5.0
2-Butanone	ND	ND	10.0
Propionitrile	ND	ND	10.0
2,2-Dichloropropane	ND	ND	5.0
cis-1,2-Dichloroethene	ND	ND	5.0
Methacrylonitrile	ND	ND	10.0
2-Propenic acid, methyl ester	ND	ND	10.0
Chloroform (KP)	ND	ND	5.0
Bromochloromethane	ND	ND	5.0
Tetrahydrofuran	ND	ND	5.0
1,1,1-Trichloroethane	ND	ND	5.0
1-Chlorobutane	ND	ND	5.0
Heptane	ND	ND	5.0
1,1-Dichloropropene	ND	ND	5.0
Carbon Tetrachloride (KP)	ND	ND	5.0
1,2-Dichloroethane	ND	ND	5.0
Benzene (KP)	ND	ND	5.0
Trichloroethene	ND	ND	5.0
1,2-Dichloropropane	ND	ND	5.0
Methyl methacrylate	ND	ND	5.0
Bromodichloromethane	ND	ND	5.0
Dibromomethane	ND	ND	5.0
2-Nitropropane	ND	ND	10.0

≤.01

≤.01

≤.01

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ANALYTE	001	003	MDL
2-Chloroethyl vinyl ether	ND	ND	10.0
1,1-Dichloro-2-propanone	ND	ND	10.0
cis-1,3-Dichloropropene	ND	ND	5.0
Ethyl methacrylate	ND	ND	5.0
trans-1,3-Dichloropropene	ND	ND	5.0
1,1,2-Trichloroethane	ND	ND	5.0
2-Hexanone	ND	ND	10.0
1,3-Dichloropropane	ND	ND	5.0
Dibromochloromethane	ND	ND	5.0
Bromoform	ND	ND	5.0
4-Methyl-2-Pentanone	ND	ND	10.0
Toluene <i>LP</i>	ND	ND	5.0
Tetrachloroethene	ND	ND	5.0
1,2-Dibromoethane	ND	ND	5.0
Chlorobenzene	ND	ND	5.0
1,1,1,2-Tetrachloroethane	ND	ND	5.0
Ethylbenzene	ND	ND	5.0
m,p-Xylenes	ND	ND	5.0
o-Xylene	ND	ND	5.0

≤.01

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ANALYTE	001	003	MDL
Styrene	ND	ND	5.0
Isopropylbenzene	ND	ND	10.0
1,1,2,2-Tetrachloroethane	ND	ND	10.0
1,2,3-Trichloropropane	ND	ND	5.0
1,4-Dichloro-2-butene	ND	ND	5.0
n-Propylbenzene	ND	ND	5.0
Bromobenzene	ND	ND	5.0
1,3,5-Trimethylbenzene	ND	ND	5.0
2-Chlorotoluene	ND	ND	5.0
4-Chlorotoluene	ND	ND	5.0
tert-Butylbenzene	ND	ND	5.0
1,2,4-Trimethylbenzene	ND	ND	5.0
Pentachloroethane	ND	ND	5.0
sec-Butylbenzene	ND	ND	5.0
p-Isopropyltoluene	ND	ND	5.0
1,3-Dichlorobenzene	ND	ND	5.0
1,4-Dichlorobenzene	ND	ND	5.0
n-Butylbenzene	ND	ND	5.0
1,2-Dichlorobenzene	ND	ND	5.0

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ANALYTE	001	003	MDL
Hexachloroethane	ND	ND	5.0
1,2-Dibromo-3-chloropropane	ND	ND	5.0
Nitrobenzene	ND	ND	5.0
1,2,4-Trichlorobenzene	ND	ND	5.0
Hexachlorobutadiene	ND	ND	5.0
Naphthalene	ND	ND	5.0
1,2,3-Trichlorobenzene	ND	ND	5.0

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Lab No. 99E-1010
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RESULTS: mg/L

SEMI-VOLATILE ORGANICS EPA 600 METHOD 625

ANALYTE	001	003	MDL
Bis-(Chloromethyl)-ether	ND	ND	0.020
Pyridine	ND	ND	0.020
Aniline	ND	ND	0.020
Benzyl alcohol	ND	ND	0.020
Phenol <i>KS</i>	ND	ND	0.005 <i>0.01</i>
2-Chlorophenol	ND	ND	0.010
Bis-(2-Chloroethyl) ether	ND	ND	0.010
N-nitrosodimethylamine	ND	ND	0.010
Bis-(2-Chloroisopropyl) ether	ND	ND	0.010
N-Nitroso-di-n-propylamine	ND	ND	0.010
1,3-Dichlorobenzene	ND	ND	0.010
1,4-Dichlorobenzene	ND	ND	0.010
1,2-Dichlorobenzene	ND	ND	0.010
o-Cresol	ND	ND	0.020
M,p-Cresol	ND	ND	0.020
Hexachloroethane	ND	ND	0.010
Nitrobenzene	ND	ND	0.010
2,4-Dimethylphenol	ND	ND	0.020
4-Chloroaniline	ND	ND	0.020
2-Nitrophenol	ND	ND	0.020

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October 5, 1999
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ANALYTE	001	003	MDL
2,4-Dichlorophenol	ND	ND	0.020
Benzoic Acid	ND	ND	0.050
4-Chloro-3-methylphenol	ND	ND	0.020
Bis-(2-Chloroethoxy) methane	ND	ND	0.010
Isophorone	ND	ND	0.010
1,2,4-Trichlorobenzene	ND	ND	0.010
2-Methylnapthalene	ND	ND	0.010
Hexachlorocyclopentadiene	ND	ND	0.010
Napthalene	ND	ND	0.010
Hexachlorobutadiene	ND	ND	0.010
2,4,6-Trichlorophenol	ND	ND	0.010
2,4,5-Trichlorophenol	ND	ND	0.010
2-Nitroaniline	ND	ND	0.050
3-Nitroaniline	ND	ND	0.050
4-Nitroaniline	ND	ND	0.010
2,4-Dinitrophenol (KP)	ND	ND	0.050
4-Nitrophenol	ND	ND	0.020
4,6-Dinitro-2-methylphenol	ND	ND	0.050
2-Chloronapthalene	ND	ND	0.010
4-Chlorophenyl phenyl ether	ND	ND	0.010
Dimethyl phthalate	ND	ND	0.010
2,6-Dinitrotoluene	ND	ND	0.010

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Lab No. 99E-1010
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ANALYTE	001	003	MDL
Acenaphthylene	ND	ND	0.010
Dibenzofuran	ND	ND	0.010
Diethyl phthalate	ND	ND	0.100
Acenaphthene	ND	ND	0.010
Benzo(g,h,i)perylene	ND	ND	0.010
Fluorene	ND	ND	0.010
Azobenzene	ND	ND	0.010
2,4-Dinitrotoluene	ND	ND	0.010
Hexachlorobenzene	ND	ND	0.010
Pentachlorophenol	ND	ND	0.050
N-Nitrosodiphenylamine	ND	ND	0.010
4-Bromophenyl phenyl ether	ND	ND	0.010
Carbazole	ND	ND	0.020
Di-n-butyl phthalate	ND	ND	0.010
Phenanthrene	ND	ND	0.010
Anthracene	ND	ND	0.010
Fluoranthene	ND	ND	0.010
Butyl benzyl phthalate	ND	ND	0.010
Bis(2-ethylhexyl) phthalate	ND	ND	0.010
Pyrene	ND	ND	0.010
Benzo(a)anthracene	ND	ND	0.010

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Lab No. 99E-1010
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ANALYTE	001	003	MDL
Chrysene	ND	ND	0.010
3,3'-Dichlorobenzidine	ND	ND	0.010
Di-n-octyl phthalate	ND	ND	0.010
Benzidine (KP)	(ND)	(ND)	(0.020)
Benzo(b)fluoranthene	ND	ND	0.010
Benzo(k)fluoranthene	ND	ND	0.010
Benzo(a)pyrene	ND	ND	0.010
Dibenzo(a,h)anthracene	ND	ND	0.010
Indeno(1,2,3-cd)pyrene	ND	ND	0.010

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Attention: Mike Kershaw

October 5, 1999
Lab No. 99E-1010
Page 11 of 12RESULTS: $\mu\text{g/L}$

PESTICIDES/PCB's SW846-8081, EPA METHODOLOGY

ANALYTE	001	003	MDL
Aldrin	ND	ND	0.018
alpha-BHC	ND	ND	0.007
beta-BHC	ND	ND	0.018
gamma-BHC (Lindane)	ND	ND	0.007
delta-BHC	ND	ND	0.020
Chlordane (Technical)	ND	ND	0.017
4,4-DDD	ND	ND	0.018
4,4-DDE	ND	ND	0.010
4,4-DDT	ND	ND	0.018
Dieldrin	ND	ND	0.007
Endosulfan I	ND	ND	0.018
Endosulfan II	ND	ND	0.010
Endosulfan Sulfate	ND	ND	0.092
Endrin	ND	ND	0.018
Endrin Aldehyde	ND	ND	0.092
Heptachlor	ND	0.0367	0.024
Heptachlor Epoxide	ND	ND	0.092

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MSD 044117



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Page 12 of 12

ANALYTE	001	003	MDL
Methoxychlor	ND	ND	0.122
Toxaphene	ND	ND	0.290
Arochlor-1016	ND	ND	1.22
Arochlor-1221	ND	ND	1.22
Arochlor-1232	ND	ND	1.22
Arochlor-1242	ND	ND	1.22
Arochlor-1248	ND	ND	1.22
Arochlor-1254	ND	ND	1.22
Arochlor-1260	ND	ND	1.22

ND: Not Detected / MDL: Method Detection Limit

CSD/mrm

Carmen S. DeBlass, Director
Environmental Testing

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October 5, 1999

Lab No. 99E-1001

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TTO₀₀₄ = 20.192 mg/l

TTO₀₀₅ = 20.17 mg/l

FG 10/19/99

RESULTS (µg/l)

EPA 600 METHOD 624 VOLATILE ORGANICS

ANALYTE	004	005	MDL
Dichlorodifluoromethane	ND	ND	10.0
Chloromethane (Methyl chloride)	ND	ND	10.0
Vinyl Chloride	ND	ND	5.0
Bromomethane	ND	ND	10.0
Chloroethane	ND	ND	10.0
Trichlorofluoromethane	ND	ND	5.0
1,1'-Oxybis-ethane	ND	ND	5.0
Acrolein (KP)	ND	ND	100.0
Acetone	ND	ND	10.0
1,1-Dichloroethene	ND	ND	5.0
Iodomethane	ND	ND	5.0
Allyl Chloride	ND	ND	5.0
Carbon Disulfide	ND	ND	5.0
Methylene Chloride (KP)	ND	ND	5.0
Acrylonitrile	ND	ND	5.0
2-Methoxy-2-methylpropane	ND	ND	5.0
Hexane	ND	ND	5.0
trans-1,2-Dichloroethene	ND	ND	5.0
Vinyl Acetate	ND	ND	10.0

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WASHINGTON UNIVERSITY

Attention: Mike Kershaw

October 5, 1999
Lab No. 99E-1001
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ANALYTE	004	005	MDL
1,1-Dichloroethane	ND	ND	5.0
2-Butanone	ND	ND	10.0
Propionitrile	ND	ND	10.0
2,2-Dichloropropane	ND	ND	5.0
cis-1,2-Dichloroethene	ND	ND	5.0
Methacrylonitrile	ND	ND	10.0
2-Propenic acid, methyl ester	ND	ND	10.0
Chloroform (KP)	ND	ND	5.0
Bromochloromethane	ND	ND	5.0
Tetrahydrofuran	ND	ND	5.0
1,1,1-Trichloroethane	ND	ND	5.0
1-Chlorobutane	ND	ND	5.0
Heptane	ND	ND	5.0
1,1-Dichloropropene	ND	ND	5.0
Carbon Tetrachloride (KP)	ND	ND	5.0
1,2-Dichloroethane	ND	ND	5.0
Benzene (KP)	ND	ND	5.0
Trichloroethene	ND	ND	5.0
1,2-Dichloropropane	ND	ND	5.0
Methyl methacrylate	ND	ND	5.0
Bromodichloromethane	ND	ND	5.0
Dibromomethane	ND	ND	5.0
2-Nitropropane	ND	ND	10.0

≤.01

≤.01

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ANALYTE	004	005	MDL
2-Chloroethyl vinyl ether	ND	ND	10.0
1,1-Dichloro-2-propanone	ND	ND	10.0
cis-1,3-Dichloropropene	ND	ND	5.0
Ethyl methacrylate	ND	ND	5.0
trans-1,3-Dichloropropene	ND	ND	5.0
1,1,2-Trichloroethane	ND	ND	5.0
2-Hexanone	ND	ND	10.0
1,3-Dichloropropane	ND	ND	5.0
Dibromochloromethane	ND	ND	5.0
Bromoform	ND	ND	5.0
4-Methyl-2-Pentanone	ND	ND	10.0
Toluene <i>LP</i>	ND	ND	5.0
Tetrachloroethene	ND	ND	5.0
1,2-Dibromoethane	ND	ND	5.0
Chlorobenzene	ND	ND	5.0
1,1,1,2-Tetrachloroethane	ND	ND	5.0
Ethylbenzene	ND	ND	5.0
m,p-Xylenes	ND	ND	5.0
o-Xylene	ND	ND	5.0

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ANALYTE	004	005	MDL
Styrene	ND	ND	5.0
Isopropylbenzene	ND	ND	10.0
1,1,2,2-Tetrachloroethane	ND	ND	10.0
1,2,3-Trichloropropane	ND	ND	5.0
1,4-Dichloro-2-butene	ND	ND	5.0
n-Propylbenzene	ND	ND	5.0
Bromobenzene	ND	ND	5.0
1,3,5-Trimethylbenzene	ND	ND	5.0
2-Chlorotoluene	ND	ND	5.0
4-Chlorotoluene	ND	ND	5.0
tert-Butylbenzene	ND	ND	5.0
1,2,4-Trimethylbenzene	ND	ND	5.0
Pentachloroethane	ND	ND	5.0
sec-Butylbenzene	ND	ND	5.0
p-Isopropyltoluene	ND	ND	5.0
1,3-Dichlorobenzene	ND	ND	5.0
1,4-Dichlorobenzene	ND	ND	5.0
n-Butylbenzene	ND	ND	5.0
1,2-Dichlorobenzene	ND	ND	5.0

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ANALYTE	004	005	MDL
Hexachloroethane	ND	ND	5.0
1,2-Dibromo-3-chloropropane	ND	ND	5.0
Nitrobenzene	ND	ND	5.0
1,2,4-Trichlorobenzene	ND	ND	5.0
Hexachlorobutadiene	ND	ND	5.0
Naphthalene	ND	ND	5.0
1,2,3-Trichlorobenzene	ND	ND	5.0

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RESULTS: mg/L

SEMI-VOLATILE ORGANICS EPA 600 METHOD 625

ANALYTE	004	005	MDL
Bis-(Chloromethyl)-ether	ND	ND	0.020
Pyridine	ND	ND	0.020
Aniline	ND	ND	0.020
Benzyl alcohol	ND	ND	0.020
Phenol (KP)	ND	ND	0.005
2-Chlorophenol	ND	ND	0.010
bis-(2-Chloroethyl) ether	ND	ND	0.010
N-nitrosodimethylamine	ND	ND	0.010
bis-(2-Chloroisopropyl) ether	ND	ND	0.010
N-Nitroso-di-n-propylamine	ND	ND	0.010
1,3-Dichlorobenzene	ND	ND	0.010
1,4-Dichlorobenzene	ND	ND	0.010
1,2-Dichlorobenzene	ND	ND	0.010
o-Cresol	ND	ND	0.020
m,p-Cresol	ND	ND	0.020
Hexachloroethane	ND	ND	0.010
Nitrobenzene	ND	ND	0.010
2,4-Dimethylphenol	ND	ND	0.020
4-Chloroaniline	ND	ND	0.020
2-Nitrophenol	ND	ND	0.020

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ANALYTE	004	005	MDL
2,4-Dichlorophenol	ND	ND	0.020
Benzoic Acid	ND	ND	0.050
4-Chloro-3-methylphenol	ND	ND	0.020
bis-(2-Chloroethoxy) methane	ND	ND	0.010
Isophorone	ND	ND	0.010
1,2,4-Trichlorobenzene	ND	ND	0.010
2-Methylnaphthalene	ND	ND	0.010
Hexachlorocyclopentadiene	ND	ND	0.010
Naphthalene	ND	ND	0.010
Hexachlorobutadiene	ND	ND	0.010
2,4,6-Trichlorophenol	ND	ND	0.010
2,4,5-Trichlorophenol	ND	ND	0.010
2-Nitroaniline	ND	ND	0.050
3-Nitroaniline	ND	ND	0.050
4-Nitroaniline	ND	ND	0.010
2,4-Dinitrophenol (KP)	ND	ND	0.050
4-Nitrophenol	ND	ND	0.020
4,6-Dinitro-2-methylphenol	ND	ND	0.050
2-Chloronaphthalene	ND	ND	0.010
4-Chlorophenyl phenyl ether	ND	ND	0.010
Dimethyl phthalate	ND	ND	0.010
2,6-Dinitrotoluene	ND	ND	0.010



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ANALYTE	004	005	MDL
Acenaphthylene	ND	ND	0.010
Dibenzofuran	ND	ND	0.010
Diethyl phthalate	ND	ND	0.100
Acenaphthene	ND	ND	0.010
Benzo(g,h,i)perylene	ND	ND	0.010
Fluorene	ND	ND	0.010
Azobenzene	ND	ND	0.010
2,4-Dinitrotoluene	ND	ND	0.010
Hexachlorobenzene	ND	ND	0.010
Pentachlorophenol	ND	ND	0.050
N-Nitrosodiphenylamine	ND	ND	0.010
4-Bromophenyl phenyl ether	ND	ND	0.010
Carbazole	ND	ND	0.020
Di-n-butyl phthalate	ND	ND	0.010
Phenanthrene	ND	ND	0.010
Anthracene	ND	ND	0.010
Fluoranthene	ND	ND	0.010
Butyl benzyl phthalate	ND	ND	0.010
bis(2-ethylhexyl) phthalate 	0.022	ND ≤ 0.01	0.010
Pyrene	ND	ND	0.010
Benzo(a)anthracene	ND	ND	0.010

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ANALYTE	004	005	MDL
Chrysene	ND	ND	0.010
3,3'-Dichlorobenzidine	ND	ND	0.010
Di-n-octyl phthalate	ND	ND	0.010
Benzidine <i>(KA)</i>	ND	ND	0.020
Benzo(b)fluoranthene	ND	ND	0.010
Benzo(k)fluoranthene	ND	ND	0.010
Benzo(a)pyrene	ND	ND	0.010
Dibenzo(a,h)anthracene	ND	ND	0.010
Indeno(1,2,3-cd)pyrene	ND	ND	0.010

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Attention: Mike Kershaw

October 5, 1999
Lab No. 99E-1001
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RESULTS: $\mu\text{g/L}$

PESTICIDES/PCB's SW846-8081, EPA METHODOLOGY

ANALYTE	004	005	MDL
Aldrin	ND	ND	0.018
alpha-BHC	ND	ND	0.007
beta-BHC	ND	ND	0.018
gamma-BHC (Lindane)	ND	ND	0.007
delta-BHC	ND	ND	0.005
Chlordane (Technical)	ND	ND	0.017
4,4-DDD	0.071	ND	0.018
4,4-DDE	0.024	ND	0.010
4,4-DDT	ND	ND	0.018
Dieldrin	ND	ND	0.007
Endosulfan I	ND	ND	0.018
Endosulfan II	0.036	ND	0.010
Endosulfan Sulfate	ND	ND	0.092
Endrin	ND	ND	0.018
Endrin Aldehyde	ND	ND	0.092
Heptachlor	ND	0.0367	0.025
Heptachlor Epoxide	ND	ND	0.092

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Attention: Mike Kershaw

October 5, 1999
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Page 12 of 12

ANALYTE	004	005	MDL
Methoxychlor	ND	ND	0.123
Toxaphene	ND	ND	0.300
Arochlor-1016	ND	ND	1.23
Arochlor-1221	ND	ND	1.23
Arochlor-1232	ND	ND	1.23
Arochlor-1242	ND	ND	1.23
Arochlor-1248	ND	ND	1.23
Arochlor-1254	ND	ND	1.23
Arochlor-1260	ND	ND	1.23

ND: Not Detected / MDL: Method Detection Limit

CSD/mrm

Carmen S. DeBlass, Director
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METROPOLITAN ST. LOUIS SEWER DISTRICT

PART I: IDENTIFYING INFORMATION

Company Name: Washington University School of Medicine - bldgs West of Euclid

Permit No:

Premise Address: 660 S. Euclid Ave. St. Louis MO 63110

Reporting Period: ☐ (JAN-MAR) ☒ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
H-3	5.483
P-32	0.490
S-35	0.334
C-14	0.044
I-125	0.081
In-111	0.020
TOTAL ACTIVITY DISCHARGED:	6.452 mCi

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. Everyone must complete the information under item B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

05 I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Missouri Department of Health have been met for the period covered by this report.

DJS I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Daniel J Szatkowski

Title: Assistant Radiation Safety Officer

Telephone: (314) 362-3479

Signature: Daniel J. Nathan

Date: 7-21-99

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METROPOLITAN ST. LOUIS SEWER DISTRICT

PART I: IDENTIFYING INFORMATION

Company Name: Washington University School of Medicine - bldgs. East of Euclid

Permit No:

Premise Address: 660 S. Euclid Ave. St. Louis MO 63110

Reporting Period: ☐ (JAN-MAR) ☒ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
H-3	91.469 mCi.
P-32	1.626
S-35	0.233
C-14	1.271
I-125	0.068
P-33	0.010
Zn-65	0.150
TOTAL ACTIVITY DISCHARGED:	94.827 mCi.

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JUL 23 1999
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PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. Everyone must complete the information under item B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

055 I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Missouri Department of Health have been met for the period covered by this report.

DJS I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Daniel J Szatkowski

Title: Assistant Radiation Safety Officer Telephone: (314) 362-3479

Signature: Daniel J. Hathorn Date: 7-21-99

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METROPOLITAN ST. LOUIS SEWER DISTRICT

PART I: IDENTIFYING INFORMATION

Company Name: Washington University School of Medicine - bldgs East of Euclid

Permit No:

Premise Address: 660 S. Euclid Ave. St. Louis MO 63110

Reporting Period: ☒ (JAN-MAR) ☐ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
H-3	66,100
P-32	1.078
S-35	0.406
C-14	0.090
I-125	0.070
P-33	0.065
Cr-51	0.002
TOTAL ACTIVITY DISCHARGED:	67.811 mCi

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PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. Everyone must complete the information under item B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

25

I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Missouri Department of Health have been met for the period covered by this report.

25

I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Daniel J Szatkowski

Title: Assistant Radiation Safety Officer

Telephone: (314) 362-3479

Signature: Daniel J. Hathcock

Date: 4-26-99

radrpt 6/94

PART I: IDENTIFYING INFORMATION

Permit No:

Reporting Period: ☒ (JAN-MAR) ☐ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
H-3	6.391
P-32	0.784
S-35	0.333
C-14	0.082
I-125	0.101
P-33	0.001
TOTAL ACTIVITY DISCHARGED:	7.692 mCi

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APR 2
Environmental

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APR 27 1999
Environmental Compliance

PART III: CERTIFICATION STATEMENTS

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

DJS I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

Signature: Daniel J. Furman Date: 4-26-99 radrpt 6/94

From: DOUG MENDOZA
To: permits
Date: 1/13/99 9:00am
Subject: NOTIFICATION OF FUTURE SIUs

The following medical schools were recently added to your Pretreatment Database.

51122162-00 Washington University School of Medicine at 660 South Euclid
63110

41121936-00 St. Louis University School of Medicine at 1402 South Grand 63104

Both have very large wastewater discharges from their laboratories (greater than 25,000 GPD). Thus, both meet the criteria for SIUs and have been added to the MSD list. Their categories will be 4,9.

CC: field, rozema